

CHIGNIK MANAGEMENT AREA
SAC ROE HERRING FISHERY
MANAGEMENT PLAN, 1996

By

David Owen

and

David Sarafin

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INTRODUCTION

Description of Area

The Chignik Management Area lies on the south side of the Alaska Peninsula between the Kodiak Management Area to the east and the Alaska Peninsula and Aleutian Islands Management Areas to the west (Figure 1). Kilokak Rocks is the eastern boundary and Kupreanof Point is the western boundary. The area is subdivided into the Eastern, Central, Chignik Bay, Western and Perryville Districts (Figure 2).

History of the Herring Fishery

At the inception of the Alaska Peninsula herring fishery in the early 1900's, Chignik area catches were grouped with catches from north and south peninsula areas and labeled as Southwestern Alaska catches. The earliest recorded commercial herring fishery occurred in 1906. Annual Southwestern Alaska herring catches for the early 1900's did not exceed 500 tons. A small herring saltery was operated at Lake Bay in the Chignik Bay District during the early 1930's. Herring were harvested with beach seines and salted for future resale. No further breakdown of catch by area is available. The herring fisheries ceased in the late 1930's and did not commence again until 1980, when the sac roe fishery was initiated.

The modern sac roe herring fishery in the Chignik Management Area began in 1980. Although the current sac roe herring fishery may not be fully developed, exploration and effort levels suggest that it will continue to be a relatively low participation and low yield fishery.

Management Strategy Sac Roe Fishery

Several geographic areas support the majority of Chignik's spawning biomass; and the herring in each of these areas are managed as discrete stocks.

The annual harvest for each identified stock is based upon biomass estimates collected during the previous sac roe season. An exploitation rate of 0-20% of the available spawning biomass is assigned to each stock as a guideline harvest level (GHL). GHL's are based on evaluation of individual stock status, recruitment, and age composition. By regulation, the sac roe herring season extends from 15 April through 30 June. Fishing periods during the season are announced by emergency order (see page 3 **Fishing Periods**). GHL's may differ from actual harvest levels if herring stocks are stronger or weaker than anticipated. The fishery is monitored through contact with commercial fishers, aerial observations of the herring biomass, as well as daily contact with local processors.

An important element in the management of the Chignik herring fishery comes from information collected by commercial fishers and spotters regarding biomass estimates, location of herring, spawn observations, etc.. This cooperation is encouraged and all exchange of information will be confidential.

CHIGNIK AREA HERRING MANAGEMENT PLAN, 1996

I. Registration Requirements:

- a. **Tenders and Processors:** Each tender operator and buyer must register in person with the Alaska Department of Fish and Game (ADF&G) and obtain a registration packet containing statistical charts, etc. in Kodiak or Chignik prior to fishing (regulation 5 AAC 27.540).
- b. **Fishing Vessels:** There is no area registration requirements for fishing vessels in 1996.

II. Buyer and Tender Reporting Requirements: Refer to the 1996-97 Commercial Herring Regulation Booklet. 5 AAC 27.590.

BUYER AND TENDER REPORTING REQUIREMENTS. In addition to the requirements of 5 AAC 39.130 (f) each tender operator and each buyer or his agents shall report in person, by telephone, or by radio to, and register with a local representative of ADF&G upon arrival in the statistical area before commencing operations and before changing location of the operation. Each buyer shall:

- (1) identify all vessels to be employed in transporting or processing herring and shall register such vessels with a local representative of ADF&G before transporting or processing herring;
- (2) make daily reports of all herring purchased from fishermen, and other processing records as specified by a local representative of the department, and
- (3) submit fish tickets before departure from the area and no later than 10 days after termination of buying operations in the area, or as otherwise specified by a local representative of the department.
 - a. All processors and tender operators will be required to report daily catch information to ADF&G. This can be accomplished either by single side band radio (SSB) or telephone. The Chignik ADF&G office will stand by on (SSB) 4125 and VHF channel 6, between 0800 hours - 1000 hours (8:00 -10:00 A.M.) and 2000 hours to 2200 hours (8:00 P.M. - 10:00 P.M.). The call sign for Chignik is KGB 76 "Chignik Weir", telephone number 845-2243, or FAX number 845-2235. If unable to contact ADF&G Chignik, your catch

information should be given to ADF&G Kodiak or Cold Bay via telephone or 4125 SSB. The call signs for Kodiak and Cold Bay are WHM 29 and WHW 906 respectively. Failure to report is a violation of commercial fishing regulations (5 AAC 27.590 (2)). Vigorous enforcement of this regulation should be expected as a result of past harvest reporting deficiencies.

- b. Because of the relatively small GHL's (Table 1) for some bays and districts, the fishing season will be promptly closed by emergency order when it appears that accurate catch information cannot be quickly obtained. Prompt catch reporting will increase the likelihood of appropriate management action; which may close a management unit once the GHL is reached, or increase the harvest if a stock is stronger than anticipated.
- c. Code sheets will be given to each tender/processor for the purpose of reporting catch (tons) and statistical area where herring were caught.

III. Guideline Harvest Level:

The Statewide policy of harvest for a 0-20% exploitation rate of the available spawning biomass will be followed. GHL's will be determined inseason on a bay or stock basis. The commercial herring harvest from the Chignik Management Area has been declining since 1980 (Figure 3). From 1980-1996, the Chignik Management Area sac roe herring harvest has ranged from 0 to 694 tons, with an average annual harvest of 107 tons (Figure 3). Based on past years interest and effort, the harvest in 1996 may be between 0 and 100 tons.

The actual 1996 harvest will depend upon the biological condition of the stock, the amount of effort actively exploring the area, and the availability of local processing.

IV. Fishing Season:

- a. Herring may be taken from 15 April through 30 June.
- b. Herring may be taken only during periods established by emergency order.

V. Fishing Periods:

Initially, fishing periods will be 24 hours long beginning at 1200 hours (12:00 noon) on all odd numbered days and ending at 1200 hours (12:00 noon) on all even numbered days. The schedule will begin at 1200 hours (12:00 noon) 15 April. The only exception to this "24-hour on - 24- hour off rule is the period from 12:00 noon June 1 through noon June 3 when the fishery will actually be closed for a 48-hour period due to the occurrence of two consecutive odd numbered days, May 31 and June 1. Any other changes in this fishing schedule will be announced by emergency order.

VI. Airplanes:

There is no restriction on the use of airplanes in the sac roe herring fishery.

VII. Legal Herring Gear:

- a. 5 AAC 27.565. (a) Herring may be taken only by purse seines.
- b. 5 AAC 27.575. **SEINE SPECIFICATION AND OPERATIONS.**
No purse seine may be more than 1,000 meshes in depth or more than 100 fathoms in length.

VIII. 1996 Management Strategy:

The 1996 Chignik sac roe herring management plan will incorporate some of the data collected during the 1980-1996 seasons. GHLS are established only in those bays where historical biomass estimates and fishing effort dictate.

IX. Closed Waters

The Big River Section appears not to have received any appreciable recruitment of herring since 1980. The trend in this stock's age composition has regressed from a healthy stock in 1980 dominated by 4 and 5 year old fish to a diminished biomass in 1986 dominated by 8 and 9 year olds. Consequently, unless harvestable concentrations of herring are observed by aerial spotters, the Big River Section (272-70 Amber Bay and 272-60 Aniakchak Bay) will remain closed in 1996. Herring stocks in Lake Bay (271-10) in the Chignik Bay District and Castle Bay (273-94) in the Castle Cape Section of the Western District will be closely monitored in 1996.

Table 1. Example Guideline harvests at 10% and 20% exploitation rates for hypothetical spawning biomass levels in the Chignik Management Area, 1996^a.

Stat Area	Management Unit	Guideline Harvest	Required Spawning Biomass	
			@20%	@10%
272-20	Amber Bay ^b	Closed	0 Tons	0 Tons
272-60	Aniakchak Bay ^b	Closed	0 Tons	0 Tons
271-10	Anchorage Bay	50 Tons	250 Tons	500 Tons
273-94	Castle Bay	5 Tons	25 Tons	50 Tons
271-10	Chignik Lagoon	5 Tons	25 Tons	50 Tons
272-30	Hook Bay	5 Tons	25 Tons	50 Tons
275-50	Humpback Bay	10 Tons	50 Tons	100 Tons
275-40	Ivanof Bay	5 Tons	25 Tons	50 Tons
272-50	Kujulik Bay	5 Tons	25 Tons	50 Tons
271-10	Lake Bay	5 Tons	25 Tons	50 Tons
272-96	Port Wrangall (Agripina)	10 Tons	50 Tons	100 Tons
TOTAL		100 Tons	500 Tons	1,000 Tons

^a The specific statistical areas listed above are those areas having a historical sac roe harvest. The remainder of the Chignik Management Area is open for exploration and will be regulated within the statewide herring harvest policy of 0% to 20% of the available biomass.

^b The Big River Section (272-70 Amber Bay and 272-60 Aniakchak Bay) will remain closed in 1996

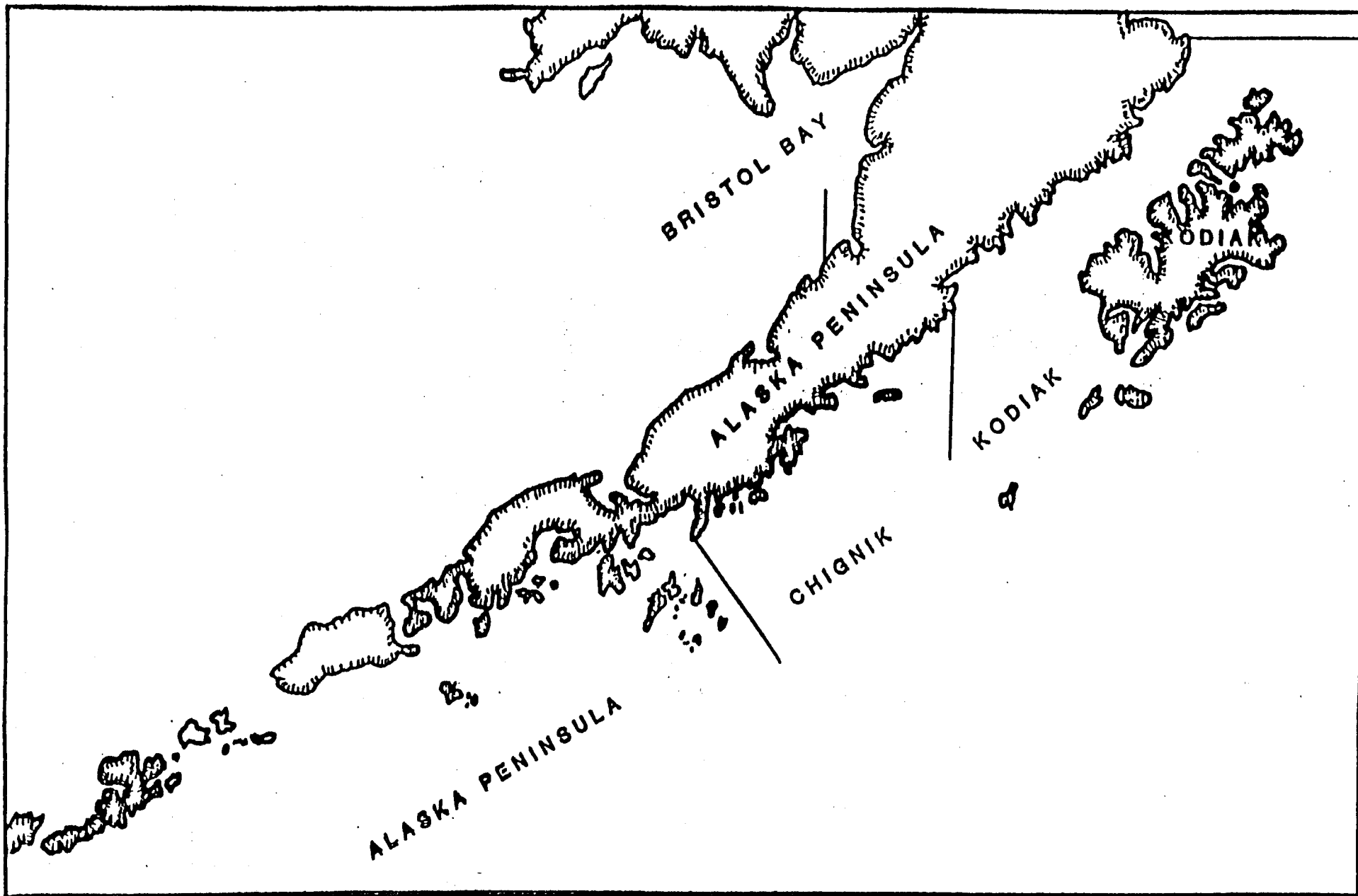


Figure 1. Map of the Alaska Peninsula illustrating the relative location of the Chignik Management Area.

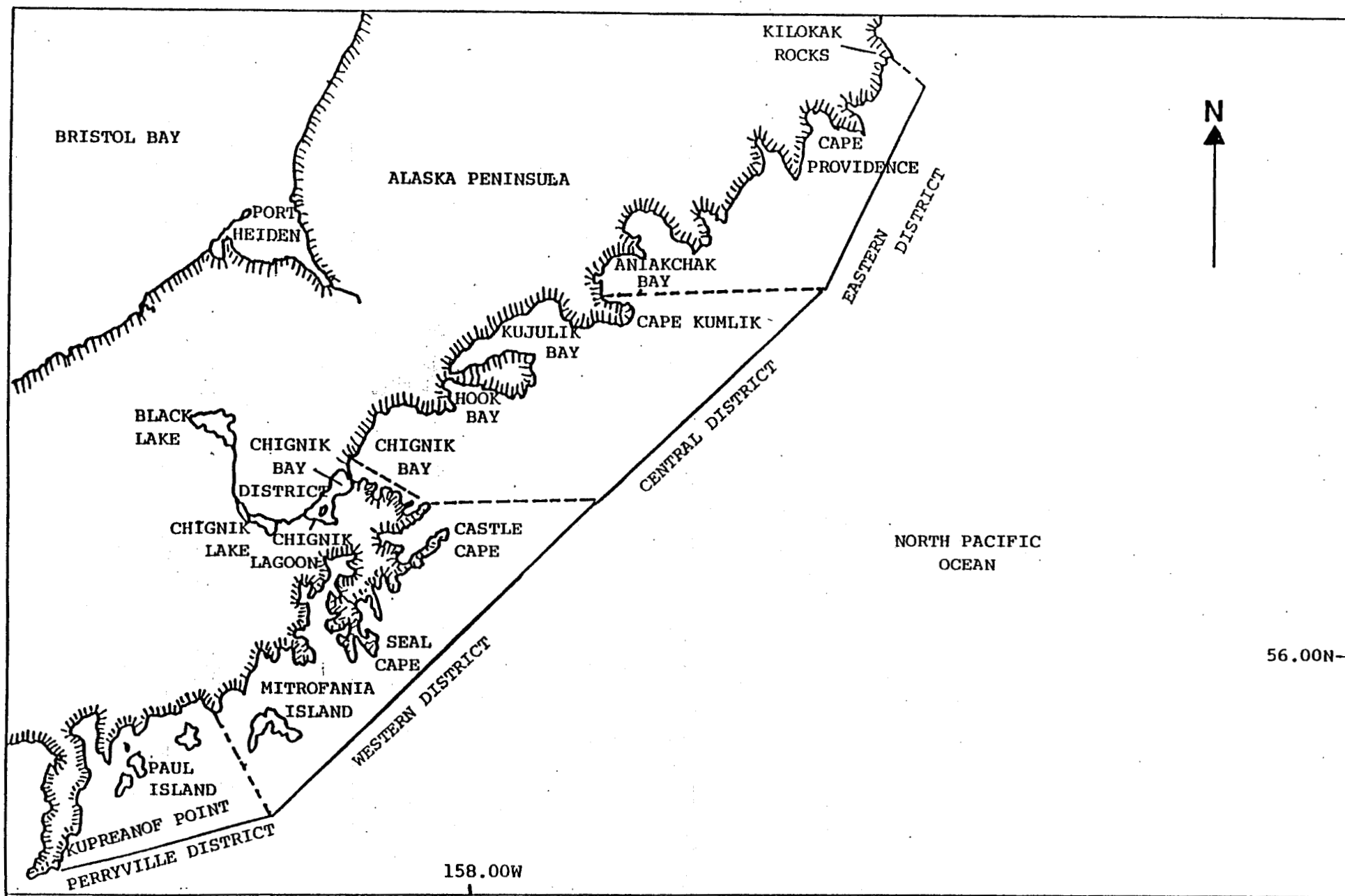


Figure 2. Map of the Chignik Management Area with the statistical fishing districts and some prominent locations identified.

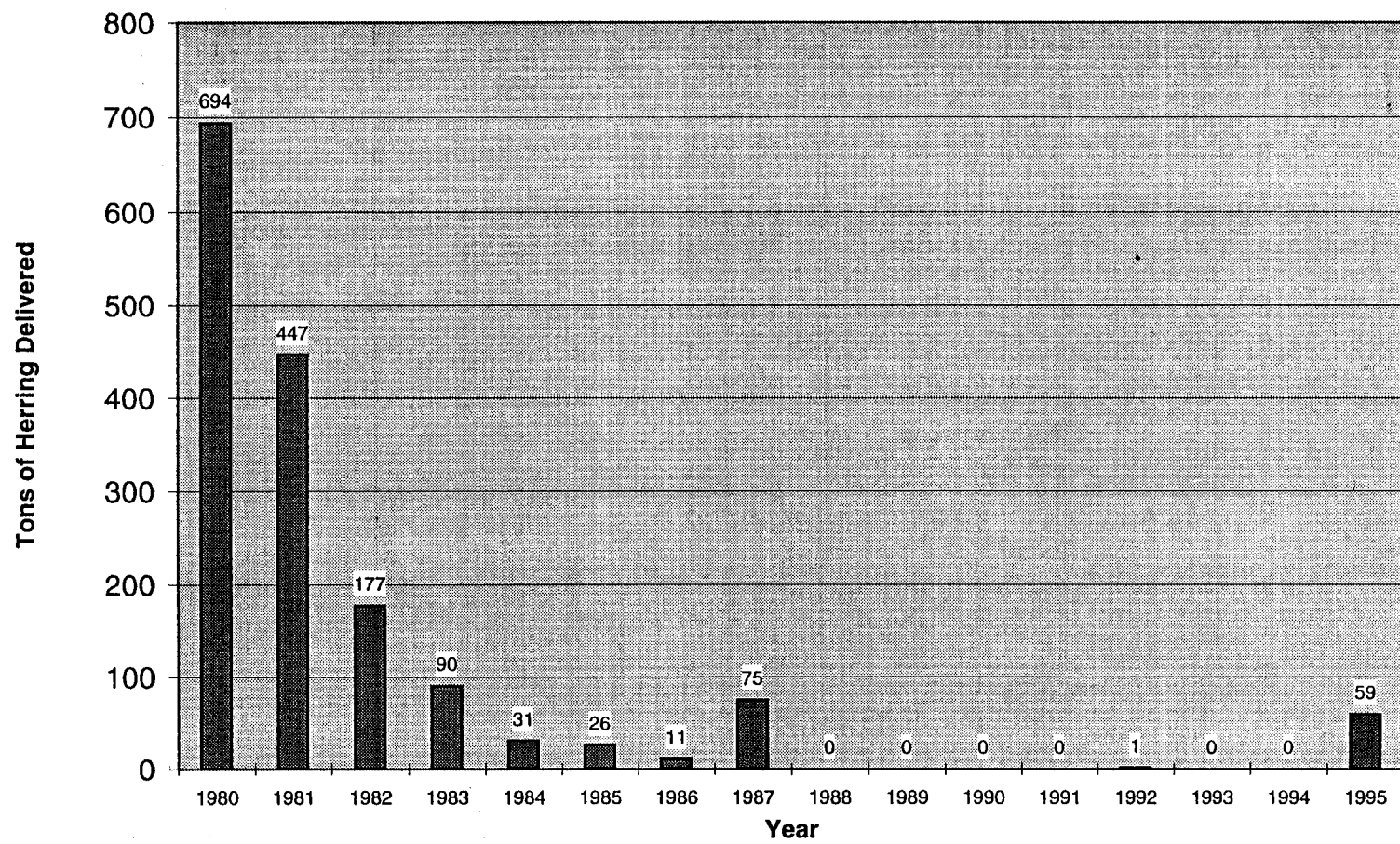


Figure 3. Herring Harvests in the Chignik Management Area, 1980 - 1996.

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